

SEP 18 2009

**Summary**

This summary of 510(k)-safety and effectiveness information is being submitted in accordance with the requirements of 21 CFR § 807.92.

**1. Company making the submission:**

Name: GISH Biomedical, Inc.  
A member of the MEDOS group  
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Rancho Santa Margarita, CA 92688-2600  
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janetp@gishbiomedical.com  
Contact: Janet Peets  
Regulatory & Clinical Affairs

**2. Device:**

Proprietary Name: MEDOS HILITE 2800 & 2400 LT Oxygenator  
Common Name: Blood Oxygenator  
Classification Name: Oxygenator, Cardiopulmonary Bypass

**3. Predicate Devices:**

CAPIOX® RX15 Hollow Fiber Oxygenator, K051997, Manufactured by Terumo

**4. Classifications Names & Citations:**

21 CFR 870.4350, Oxygenator, Cardiopulmonary Bypass, Class II, DTZ, Cardiovascular

**5. Description:**

The MEDOS HILITE 2800 & 2400 LT Hollow Fiber Oxygenators consist of a hollow fiber membrane oxygenator and extracorporeal heat exchanger. The MEDOS HILITE 2800 hollow fiber membrane consists of a polypropylene gas permeable mat. The MEDOS HILITE 2400 LT hollow fiber membrane consists of a polymethylpentene gas plasma tight mat. The unique mat design increases the interaction between blood and gas, creating a highly efficient blood oxygenator. The heat exchanger consists of a polyester non-porous hollow fiber configured heat exchanger as the primary element to affect heat exchange. This element is encased by a polycarbonate housing, which directs the blood around the outside of the fibers while water flows through the inner lumen of the fibers and therefore effects heat exchange while minimizing priming volume.

**6. Indications for use:**

The MEDOS HILITE 2800 & 2400 LT Hollow Fiber Oxygenators are indicated for use in procedures requiring the extracorporeal oxygenation of and carbon dioxide removal from human blood. The 2800 & 2400 LT are pediatric oxygenators intended for use at blood flow rates of 0.5 to 2.8 liters per minute for the HILITE 2800 and 0.5 to 2.4 liters per minute for the HILITE 2400 LT for periods of up to six (6.0) hours.

**7. Contra-indications:**

For oxygenators, no contra-indications have been noted.

**8. Comparison:**

The MEDOS HILITE 2800 & 2400 LT Oxygenators have the same device characteristics as the predicate device.

**9. Test Data:**

In accordance with FDA Guidance for Cardiopulmonary Bypass Oxygenators 510(k) submissions, the MEDOS HILITE 2800 and 2400 LT Oxygenators have completed extensive safety, performance, and validation testing prior to release. Final testing for the systems includes various performance tests designed to ensure that the device meets all of its functional requirements and performance specifications. Safety tests have further been performed to ensure the device complies with applicable industry and safety standards.

**10. Literature Review:**

A review of literature pertaining to the safety and effectiveness has been conducted. Appropriate safeguards have been incorporated in the design of the MEDOS HILITE 2800 & 2400 LT Oxygenator.

**11. Conclusions:**

Based upon the testing and comparison to the predicate device, the MEDOS HILITE 2800 & 2400 LT Oxygenator have the same intended use, with similar technological characteristics. MEDOS Medizintechnik AG therefore posits that its device is equivalent in safety and effectiveness to the predicate device.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

SEP 18 2009

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Room -WO66-G609  
Silver Spring, MD 20993-0002

Gish Biomedical, Inc.  
c/o Ms. Janet Peets  
Regulatory & Clinical Affairs Specialist  
22942 Arroyo Vista  
Rancho Santa Margarita, CA 92688

Re: K090450  
Medos Hilite Pediatric Oxygenator, Models 2800, 2400 LT  
Regulation Number: 21 CFR 870.4350  
Regulation Name: Oxygenator, cardiopulmonary bypass (with heat exchanger)  
Regulatory Class: Class II  
Product Code: DTZ  
Dated: August 25, 2009  
Received: August 26, 2009

Dear Ms. Peets:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.


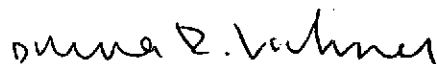
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,



Bram D. Zuckerman, M.D.  
Director  
Division of Cardiovascular Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

510(k) Number K090450**Device Name: MEDOS HILITE 2800 & 2400 LT Oxygenator****Indications for use:**

The MEDOS HILITE 2800 & 2400 LT Hollow Fiber Oxygenators are indicated for use in procedures requiring the extracorporeal oxygenation of and carbon dioxide removal from human blood. The 2800 & 2400 LT are pediatric oxygenators intended for use at blood flow rates of 0.5 to 2.8 liters per minute for the HILITE 2800 and 0.5 to 2.4 liters per minute for the HILITE 2400 LT for periods of up to six (6.0) hours.

**Prescription Device:**

Federal Law (US) restricts this device to sale by or on the order of a physician.

Prescription Use : Yes

OR

Over-The-Counter Use: No

PLEASE DO NOT WRITE BELOW THIS LINE- CONTINUE ON ANOTHER PAGE IF  
NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

*Dennis R. Holmes*  
(Division Sign-Off)  
Division of Cardiovascular Devices

510(k) Number K090450